

25X1

25X1

11 March 1971

25X1

MEMORANDUM FOR:

THROUGH :

SUBJECT :

REFERENCES :

R-400 Microwave Equipment in the Moscow Area, USSR

Requirement No. NSA/SPO/R-74-71
NSA/SPO/R-82-71
NPIC Project 251002
251014

**LOAN COPY
RETURN TO DSB
IH1107, Hq.**

25X1

1. The requirements requested a readout of 40 installations or locations identified by geographic coordinates for the purpose of locating or confirming the presence of radio relay stations and identifying the microwave equipment. The specific information requested includes the following:

- a. Location of the facility by geographic coordinate to the nearest second;
- b. Type and height of the antenna mast;
- c. Type, number, and cardinal azimuths of the microwave elements;
- d. Immediate support facilities and direct or indirect support with nearby military or other support facilities;
- e. Any evidence of "hook-up" via overhead or buried cable;
- f. The presence of any other microwave radio-relay communications at these facilities.

2. The 40 locations were derived from [redacted] sightings of R-400 microwave equipment. Photography of all 40 locations was available, and the readouts were accomplished on the latest and best photography of each location. Only small-scale [redacted] photography was available for 18 of the locations. When no microwave equipment could be found at a location, a search was made within a 5-nautical-mile (nm) radius of the referenced geographic coordinates to determine whether or not a radio relay station was in the area.

25X1

25X1

Declassification Review by NIMA/DoD

25X1

GROUP I: EXCLUDED FROM
Automatic Downgrading
and Declassification

1

25X1

25X1

Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0

25X1

11 March 1971

25X1

SUBJECT: R-400 Microwave Equipment in the Moscow Area, USSR

3. Each location where microwave equipment was observed is described as follows:

a. The first line represents the name and geographic coordinates of the location as given [REDACTED]

25X1

b. The second line contains the BE-TDI name and BE number of the facility containing the microwave equipment. In some cases this line refers the reader to another facility, indicating that one radio relay station serves two or more of the locations specified in the [REDACTED]

25X1

c. Subordinate items (a) through (f) contain the specific information concerning the microwave equipment as itemized in subparagraphs a through f in paragraph 1.

Following are descriptions of the 15 installations where microwave equipment or a radio relay station was observed:

1 - BABYNIO 54-23-00N 035-46-00E

BABYNINO RADREL STATION [REDACTED]

25X1

(a) 54-23-49N 035-44-00E

(b) Steel lattice tower [REDACTED] in height.

25X1

(c) R-60/120 periscopic relay station consisting of two upper plane reflectors and two lower ellipsoidal reflectors with cardinal azimuths of northeast and southwest.

(d) Immediate support facilities consist of one control building and one support building.

(e) None

(f) None

2 - DURYKINO/LOZHKI 56-04-27N 037-07-14E

PERSHKI RADREL STATION [REDACTED]

25X1

(a) 56-08-40N 037-03-50E

(b) Masonry tower of undetermined height.

(c) The type, number, and cardinal azimuths of the antennas is undetermined due to the small scale of the photography.

25X1

25X1

Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0

TOP SECRET

25X1

11 March 1971

25X1

SUBJECT: R-400 Microwave Equipment in the Moscow Area, USSR

- (d) Immediate support facilities consist of one control building and five support buildings. The radio relay station may indirectly support Solnechnogorsk Army Barracks and Infantry School AL 1 () or Moskva Radcom and Radrel Station Lozhki ()

25X1

25X1

(e) None

(f) None

- 3 - MOSCOW SAM SITE C33-1 56-07-57N 037-11-14E
This installation is served by PESHKI RADREL STATION
() See item 2.

25X1

- 4 - KINESHMA SAM SITE COL-2 57-49-51N 042-10-59E

KINESHMA SAM SITE COL-2 ()

25X1

(a) 57-49-51N 042-10-59E

(b) Steel guyed tower () in height.

25X1

(c) A probable communications tower of undetermined type was observed in the southeast corner of the launch area. This equipment has been previously reported as an unidentified acquisition radar.

(d) Immediate support equipment consists of two van trucks, two van or cargo trailers, and two probable single-axle trailers.

(e) The unidentified tower and equipment appears to be associated with the guidance area of the SA-2 launch site and is connected by a buried cable. A second scar from the tower is connected to a support building and earth-covered structure.

(f) None

- 5 - MIKHAYLOVSKOE 55-00-30N 033-22-00E

SAFANOVO RADREL STATION ()

25X1

(a) 55-05-05N 033-12-50E

(b) Steel lattice tower () in height.

25X1

(c) Two R-600 antennas (Vesna horns) with cardinal azimuths of west and east-northeast.

(d) Immediate support facilities consist of one control building, one probable administration building, and five storage or support buildings.

25X1

25X1

3

Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0

TOP SECRET

25X1

TOP SECRET [REDACTED]
 Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0

25X1

25X1

[REDACTED]
 11 March 1971

SUBJECT: R-400 Microwave Equipment in the Moscow Area, USSR

- (e) None
- (f) At least four additional ring supports for R-600 antennas are mounted near the top of the lattice tower.

6 - NPN 55-07-00N 033-09-00E
 This geographic coordinate sighting is served by SAFANOVO RADREL STATION [REDACTED] See item 5.

25X1

7 - PENKOVO 55-08-00N 033-22-00E
 This installation is served by SAFANOVO RADREL STATION [REDACTED] See item 5.

25X1

8 - MOSKVA OUTER RING ROAD AND KALUGA HIGHWAY 55-34-30N 037-35-00E
 MOSKVA RADREL STATION KRASNYY STROITEL [REDACTED]
 (a) 55-35-51N 037-34-55E
 (b) Steel guyed tower [REDACTED] in height.
 (c) The type, number, and cardinal azimuths of the antennas are undetermined due to the poor interpretability of the photography.
 (d) Immediate support facilities consist of one control building and one support building. The radio relay station may directly or indirectly support Moskva Commo Barracks Staryye Bittsy AL 4 (BE 0167-none).
 (e) None
 (f) None

25X1

25X1

9 - POKROVSKOYE 55-36-00N 037-37-00E
 This location is served by MOSKVA RADREL STATION KRASNYY STROITEL [REDACTED] See item 8.

25X1

10 - SMOLENSK RADAR SITE 54-47-00N 032-03-00E
 SMOLENSK RADREL/TV AND FM BC STATION [REDACTED]
 (a) 54-46-45N 032-02-40E
 (b) Steel lattice tower [REDACTED] in height.
 (c) R-60/120 periscopic relay station consisting of two upper plane reflectors and two lower ellipsoidal reflectors with probable cardinal azimuths of southeast and west-southwest.
 (d) Immediate support facilities consist of one control building, one probable generator building, and one support building. The radio relay station may indirectly support the ground force installation within

25X1

25X1

25X1

25X1

25X1

Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0

TOP SECRET

25X1

11 March 1971

25X1

SUBJECT: R-400 Microwave Equipment in the Moscow Area, USSR

the city of Smolensk.

(e) None

(f) None

11 - VOLOGDA AW RADAR AND TALL KING FACILITY 59-08-00N 040-04-00E
VOLOGDA RADREL/TV FACILITY [REDACTED]

25X1

(a) 59-11-00N 039-55-00E

(b) Steel guyed tower [REDACTED] in height.

25X1

(c) R-60/120 periscopic relay station consisting of at least two upper plane reflectors and two lower ellipsoidal reflectors with probable cardinal azimuths of southeast and west.

(d) Immediate support facilities consist of one control building and four support buildings. The radio relay station may indirectly support the ground force installations or other electronic-associated facilities in or near Vologda.

(e) None

(f) None

12 - VOLOGDA RADCOM STATION PRILUKI AL 5 59-14-45N 039-55-10E
This facility is served by VOLOGDA RADREL/TV FACILITY

[REDACTED] See item 11.

25X1

13 - VOLOGDA RADCOM STATION MILITARY 59-16-40N 039-53-00E
This facility is served by VOLOGDA RADREL/TV FACILITY

[REDACTED] See item 11.

25X1

14 - YAROSLAVL SAM SITE B02-2 57-47-53N 039-57-42E
TOLBUKHINO RADREL STATION [REDACTED]

25X1

(a) 57-51-00N 040-02-10E

(b) Steel guyed tower of undetermined height.

(c) The type, number, and cardinal azimuths of the antennas are undetermined due to the small scale of the photography.

(d) Immediate support facilities consist of one control building and four support buildings. The radio relay stations may indirectly support Yaroslavl SAM Site

25X1

B02-2 [REDACTED]

25X1

(e) None

25X1

25X1

TOP SECRET
 Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0

25X1

11 March 1971

25X1

SUBJECT: R-400 Microwave Equipment in the Moscow Area, USSR

(f) None

- 15 - YAROSLAVL SAM SITE B21-2 57-23-04N 039-42-42E
 YAROSLAVL RADREL STATION (BE 0154-none)
- (a) 57-24-55N 039-41-40E
 - (b) Steel lattice tower 64.0 meters (210 feet) in height.
 - (c) The type and number of antennas is undetermined due to poor interpretability of the photography. The cardinal azimuths are probably northeast and southwest.
 - (d) Immediate support facilities consist of one control building, five support buildings, and one vehicle shed. The radio relay station may indirectly support Yaroslavl SAM Site B21-2
 - (e) None
 - (f) None

25X1

25X1

5. At the following locations or geographic coordinates no microwave equipment or radio relay stations were identified:

16 - BALABANOVO*	55-11-00N 036-41-00E
17 - BEZHETSK AFLD AW RADAR AND TK FAC	57-44-00N 036-39-00E
18 - CHEKOV COMMAND/CONTROL FAC	55-09-55N 037-15-20E
19 - CHERN*	53-28-00N 036-59-00E
20 - KALINGRAD*	55-57-00N 037-48-00E
21 - KOSTROMA ICBM SAM SITE A32-2	58-06-21N 041-04-32E
22 - KOSTROMA ICBM SAM SITE B21-2	57-48-47N 041-02-12E
23 - KOSTROMA SAM CPLX D04-5	58-13-20N 041-37-55E
24 - KUNTSEVO*	55-45-00N 037-22-40E
25 - MAKAROVO*	57-19-00N 039-33-00E
26 - MONINO RADIO COM STA/HARD	55-49-50N 038-11-20E
27 - MOSKVA RAD BC XMTR STA TARASOVKA*	55-57-55N 037-49-10E
28 - MOSKVA SAM SITE E05-3	56-15-20N 038-29-50E
29 - NPN*	56-08-00N 037-19-00E
30 - PENINO RADIO COM STATION*	53-33-00N 037-22-00E
31 - PETUSKI*	55-55-00N 039-28-00E
32 - RYBINSK SAM SITE A13-2	57-58-15N 039-04-29E
33 - TISHINO RADAR SITE*	54-50-00N 031-39-00E

25X1

25X1

Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0

TOP SECRET

25X1

TOP SECRET [REDACTED]
 Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0

25X1

[REDACTED]
 11 March 1971

25X1

SUBJECT: R-400 Microwave Equipment in the Moscow Area, USSR

34 - TROITSKY RADCOM RCVR STA W	55-29-30N 037-15-00E
35 - YAM*	55-29-00N 037-45-00E
36 - YAROSLAVL SAM SITE B10-2	57-34-54N 040-16-41E
37 - YAROSLAVL SAM SITE B29-2*	57-40-39N 039-33-52E
38 - YAROSLAVL SAM SITE B29A-2*	57-41-00N 039-31-20E
39 - YEDROVO SSM SAM SITE C32-2	57-55-00N 033-38-00E
40 - ZAGORSK*	56-17-00N 038-07-00E

25X1

*Small-scale [REDACTED] coverage only

6. NPIC will report by OAK, OAK Supplement, or cable any new radio relay stations or microwave equipment observed on future photography.

7. This project is considered complete. Questions regarding this project may be directed to [REDACTED] of the Western USSR Branch, WGD/IEG, on extension [REDACTED]

25X1

25X1

25X1

Distribution:

- 1 & 2 - TCO/NSA/PO4/SOC
- 3 - NSA/LO/NPIC
- 4 & 5 - NPIC/IEG/WGD
- 6 - NPIC/PSG/R&RD/TPDB
- 7 - NPIC/IEG/OD
- 8 - NPIC/PSG/RRD/ESS
- 9 - DC-5C
- 10 - DS-3B9
- 11 - TCO/NRTSC
- 12 - CIA/DDI/IRS/Recce/R
- 13 - CIA/IAS

25X1

Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0

TOP SECRET [REDACTED]

25X1

25X1

Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0

Approved For Release 2003/09/30 : CIA-RDP78T04759A009800010019-0